AIR POLLUTANT EMISSION NOTICE (APEN) & Application for Construction Permit – Amine Sweetening Unit -

Permit Number: _____ [Leave blank unless APCD has already assigned a permit # & AIRS ID] **Emission Source AIRS ID:** ____ / ____ / ____

Facility Equipment ID: _____ [Provide Facility Equipment ID to identify how this equipment is referenced within your organization.]

Section 01 – Administrative Information

Company Name: _____ NAICS, or SIC Code: _____

Source Name: _____

Source Location: _____ County: _____

_____ Elevation: _____ Feet

Mailing Address: _____ ZIP Code: _____

_____

Person To Contact: _____ Phone Number: _____

E-mail Address: _____ Fax Number: _____

Section 02 – Requested Action (Check applicable request boxes)

☐ **Request for NEW permit or newly reported emission source**

☐ **Request MODIFICATION to existing permit (check each box below that applies)**

☐ Change process or equipment ☐ Change company name

☐ Change permit limit ☐ Transfer of ownership ☐ Other

☐ **Request to limit HAPs with a Federally enforceable limit on PTE**

☐ **Request APEN update only (check the box below that applies)**

☐ Revision to actual calendar year emissions for emission inventory

☐ Update 5-Year APEN term without change to permit limits or previously reported emissions

Addl. Info. & Notes: _____

Section 03 – General Information

For existing sources, operation began on: ____ / ____ / ____ For new or reconstructed sources, the projected startup date is: ____ / ____ / ____

Normal Hours of Source Operation: ____ hours/day ____ days/week ____ weeks/year

General description of equipment and purpose: _____

► Will this equipment be operated in any NAAQS nonattainment area? (http://www.cdphe.state.co.us/ap/attainmaintain.html) ☐ Yes ☐ No ☐ Don't know

► Does this facility have a design capacity less than 2 long tons/day of H_2S in the acid gas? Provide documentation. ☐ Yes ☐ No ☐ Don't know

Section 04 – Amine Sweetening Unit Equipment Information

Manufacturer: _____ Model: _____ Serial No.: _____

Reboiler Rating: _____ MMBtu/hr Absorber Column Stages: _____ stages

Amine Type: ☐ MEA ☐ DEA ☐ TEA ☐ MDEA ☐ DGA

Amine Pump Make & Model: _____ # of Pumps: _____

Sweet Gas Throughput: Design Capacity: _____ MMSCF/day Requested[1]: _____ MMSCF/yr.

Calendar year actual: _____ MMSCF/yr.

Inlet Gas:	Pressure:		psig	Temperature:		°F		
Rich Amine Feed:	Pressure:		psia	Temperature:		°F	Flowrate:	gal/min
Lean Amine Stream:	Pressure:		psia	Temperature:		°F	Flowrate:	gal/min
	wt. % amine:			Mole loading H_2S:			Mole loading CO_2:	
Sour Gas Input:	Pressure:		psia	Temperature:		°F	Flowrate:	MMSCF/day
NGL Input:	Pressure:		psia	Temperature:		°F	Flowrate:	gal/min
Flash Tank:	Pressure:		psia	Temperature:		°F	☐ None	

[1]Requested values will become permit limitations.

Additional Information Required:

☐ Attach a process flow diagram

☐ Attach the simulation model inputs & emission report

☐ Attach composition reports for the rich amine feed, sour gas feed, NGL feed, & outlet stream (emissions)

☐ Attach the extended gas analysis (including BTEX & n-Hexane, H_2S, CO_2, 2,2,4 Trimethylpentane)

Colorado Department of Public Health and Environment
Air Pollution Control Division (APCD)

This notice is valid for five (5) years. Submit a revised APEN prior to expiration of five-year term, or when a significant change is made (increase production, new equipment, change in fuel type, etc).

Mail this form along with a check for $152.90 to:
Colorado Department of Public Health & Environment
APCD-SS-B1
4300 Cherry Creek Drive South
Denver, CO 80246-1530

For guidance on how to complete this APEN form:

Air Pollution Control Division: (303) 692-3150
Small Business Assistance Program (SBAP): (303) 692-3148 or (303) 692-3175
APEN forms: http://www.cdphe.state.co.us/ap/downloadforms.html
Application status: http://www.cdphe.state.co.us/ap/ss/sspcpt.html

☐ Check box to request copy of draft permit prior to issuance.

☐ Check box to request copy of draft permit prior to public notice.

FORM APCD-206

AIR POLLUTANT EMISSION NOTICE (APEN) & Application for Construction Permit – Amine Sweetening Unit -

Permit Number: _____ **Emission Source AIRS ID:** _____ / _____ / _____

Section 05 – Stack Information (Combustion stacks must be listed here)

Operator Stack ID No.	Stack Base Elevation (feet)	Stack Discharge Height Above Ground Level (feet)	Temp. (°F)	Flow Rate (ACFM)	Velocity (ft/sec)	Moisture (%)

Section 06 –Stack (Source, if no combustion) Location (Datum & **either** Lat/Long **or** UTM)

Horizontal Datum (NAD27, NAD83, WGS84)	UTM Zone (12 or 13)	UTM Easting or Longitude (meters or degrees)	UTM Northing or Latitude (meters or degrees)	Method of Collection for Location Data (e.g. map, GPS, GoogleEarth)

Direction of stack outlet (**check one**): ☐ Vertical ☐ Vertical with obstructing raincap ☐ Horizontal ☐ Down ☐ Other (Describe): _____

Exhaust Opening Shape & Size **(check one):** ☐ Circular: Inner Diameter (inches) = _____ ☐ Other: Length (inches) = _____ Width (inches) = _____

Section 07 – Control Device Information (Indicate if a control device controls the **flash tank and/or regenerator emissions**)

☐ **Condenser** used for control of: _____
Type: _____ Make/Model: _____
Temperature (°F): Maximum: _____ Average: _____
Requested VOC & HAP Control Efficiency: _____ %

☐ **VRU** used for control of: _____
Size: _____ Make/Model: _____
Requested VOC & HAP Control Efficiency: _____ %
Annual time that VRU is bypassed (emissions vented): _____ %

☐ **Combustion Device** used for control of: _____ Rating: _____ MMBtu/hr
Type: _____ Make/Model/Serial #: _____
VOC & HAP Control Efficiency: Requested: _____ % Manufacturer Guaranteed: _____ %
Minimum temp. to achieve requested control: _____ °F Waste gas heat content: _____ Btu/scf
Constant pilot light? ☐ Yes ☐ No Pilot burner rating: _____ MMBtu/hr

☐ **Closed loop system** used for control of: _____
Description:

☐ Describe Any **Other**:

Section 08 – Emissions Inventory Information & Emission Control Information

☐ **Emission Factor Documentation attached** **Data year for actual calendar yr. emissions below & gas throughput above (e.g. 2007):** _____

Pollutant	Control Device Description		Control Efficiency (% Reduction)	Emission Factor		Actual Calendar Year Emissions[2]		Requested Permitted Emissions[3]		Estimation Method or Emission Factor Source
	Primary	Secondary		Uncontrolled Basis	Units	Uncontrolled (Tons/Year)	Controlled (Tons/Year)	Uncontrolled (Tons/Year)	Controlled (Tons/Year)	
NO_X	Identify in Section 07									
VOC										
CO										
Benzene										
Toluene										
Ethylbenzene										
Xylene										
n-Hexane										

Please use the APCD Non-Criteria Reportable Air Pollutant Addendum form to report pollutants not listed above.

[2] Annual emission fees will be based on actual emissions reported here. If left blank, annual emission fees will be based on requested emissions.
[3] If Requested Permitted Emissions is left blank, the APCD will calculate emissions based on the information supplied in sections 03 - 08.

Section 09 –Applicant Certification - I hereby certify that all information contained herein and information submitted with this application is complete, true and correct.

Signature of Person Legally Authorized to Supply Data	Date	Name of Legally Authorized Person (Please print)	Title